Utah Citizens Advisory Commission on Chemical Weapons Demilitarization

Thursday, May 20, 2004
Utah Department of Environmental Quality
MINUTES

Members present:	**Members absent:**
Debbie Kim	**Rosemary Holt**
Michael A. Keene	**Sid Hullinger**
Beverly White	**Dan Bauer**
Geoff Silcox	**Dennis Downs**
Jane Bowman	
David Ostler	
John Bennett	

Welcome/Minutes – Deborah Kim, CAC Chair
Debbie Kim called meeting to order.
The minutes were approved with the following modifications:

- Page 2, discussion of Mustard Strategy. Revised first sentence to read" The mustard strategy is currently under consideration by the CMA"
- Page 3, of the minutes made on the third bullet item (top) to read: "up to 15% of the HD containers have mercury contamination".

All votes were in favor. Next meeting July 8, 2004 4:00 p.m. at Ophir Park

AEGLS revised limits - Dr. Paul Joe, CDC. A handout was provided.
Dr. Paul Joe from CDC providing a briefing entitled: *General Population Limits (GPL) : Interpretation and Use.* This presentation reviewed the concept of AEGLS, and when they are appropriate for use. Emergency Response limits mean that there is immediate danger by irritation, smell, possible death. The presentation showed detailed information regarding the AEGLS and the exposure limits set.

Q-What does the phrase immediate danger mean?
A-Have up to 30 minutes to evacuate area before some irritation or significant ill effects occur.
Q-In terms of comparison such as a gas – do you assume a standard? With particle size etc?
A-Yes, we aerosolize it and we did the same thing for mustard, numbers worked out well.
Q-JG-What does AEGL 1, 2, 3 mean?

1-Minimum effects
2-Irritation and impairment
3-Long term, up to death

Q-Given the GPL (General Populations Limit), what is the sensitivity to the monitoring system picking up these levels? Is this something that shows up?

A-It is recommended that historical monitors be used, will not get instantaneous response vs. real time monitors. DAAMS Stations can detect all 3 agents at current GPL's and higher and will be able to detect the proposed levels that will be coming into effect January 2005.

Q -What is the timeline getting these new proposed values in place?
A -Jan 05, Mustard - July 05

Q-JG-What triggered the new review of the levels?
A-Army came up w/new levels and since we have oversight they were given to us for review.
Q-JG-Is there any difference w/multiple exposures? More sensitive if exposed 2 or 3 times?

A-GPL/WPL (Worker Population Limit) low L level – no acute exposure limit, lowest level that will have effect then apply safety and modifying factors,

Would they change w/multiple exposures? Is there a cumulative effect?
There is not proof that agent builds up in the system.

Bunning Amendment update – Greg St. Pierre – CMA, Chemical Materiel Agency. Hand out was provided
Mr. Greg St. Pierre from the Chemical Materiel Agency (CMA) presented a briefing on the measures requested by Senator Bunning to implement enhanced monitoring for the communities around the chemical depots. A hand out was provided entitled, "*Chemical Agent Monitoring Systems Update"*. This was the same briefing that was presented to Sen. Bunning and his staff in early April.

CMA presented measures that have been taken to improve existing monitoring systems and try to gain understanding of what congress is looking for regarding monitoring to try and resolve issues of concern. One of the concerns was more interaction with the DOD to determine what monitoring capabilities and options are out there. Also, deploy any monitors that we find to provide max protection to workers and environment. Mr. St. Pierre explained how CMA does monitoring now. CMA has an annual multimillion dollar program to evaluate new equipment and improve existing near real time monitors and historical monitoring systems. CMA has not found an off the shelf system that beats what we have right now. New technologies are being identified, but none are better than what we have, always working on optimizing what we have now as well.
One goal is to minimize interference. The false alarm rate is less than 1% and they continue to drive the false alarm rate even lower. The Edgewood Chemical and Biological site does a lot of validation testing on monitors. After Edgewood, the monitors

are moved to an onsite location. CMA has not been a priority in the past, due to other national priorities such as Homeland security. CMA along with several other agencies, including international agencies work together to find better ways of monitoring.

To specifically respond to the request of the FTIR–(Fourier Transfer Infrared) monitor – Many detectors have been evaluated by DOD process and at the R& D Level along with FTIR. In order for the FTIR monitor to work you need to have them at 400-1000 meters, (the closer the better). We need to have large clouds of agent in order to be detected. This an aerosol type of detection device. It is ideal for battlefield situations. To get detection of GB on the FTIR, a spill of 20 rockets would need to happen, which is about 200 lbs. of GB, at the installation boundary. We have never had that kind of spill. To detect VX or mustard, we would need to have an explosion or fire to detect these agents, as FTIR does not detect vapor - only aerosol.

The CDC and NRC have been involved in demonstration testing of the FTIR. They have said that the FTIR does not satisfy the need for perimeter monitoring, for reasons discussed above. In addition, weather would impact the reliability of detection of agent release. The smaller the source strength, the smaller the cloud, therefore less reliability.

It was suggested to Senator Bunning's staff that there will be another monitoring workshop opportunity, in addition to the annual workshop already conducted. This would be a forum in which to discuss monitoring technologies at a neutral site in order to raise awareness. Invitations will be extended to those contractors who feel they have monitoring systems which would be an improvement over the present technology. This is tentatively scheduled for Fall –'04, and would provide contractors an opportunity to test their products (using simulants), in an outdoor environment.

Senator Bunning's staffers asked what else could be done. Mr. St. Pierre commented that the technology isn't the issue, it is perception. We want to ensure that the population is protected to the maximum level possible. The intent is not to just purchase new monitors. It is important to assure that what is being used is the best possible monitoring system. CMA is formally tied to the DOD program evaluation, assessment testing etc. for new monitoring systems.

Q- Jason Groenwald (JG)- The 1% false positive rate - was that for ACAMS or the Near Real Time (NRT) monitors? Could you explain the frequency of alarms, specifically, can they be explained away as false alarm or interference, especially if we are getting <1%, how can each one be considered false alarms?

DO-When looking at the number of cycles per day (37,500 per day), having one false alarm per week, is an extremely low rate. For every alarm that occurs with an ACAMS, we pull the DAAMS tube, and determine if the alarm is either interference or agent. Alarms are not considered false until confirmed by analyzing the independent piece of monitoring equipment.

Q-Action Levels for VX have dropped significantly for the GPL, when will these new levels be in effect?
A-1 Jan 05 for GPL for nerve agent
STEL (Short Term Exposure Limits) for VX exact same concentration as TWA (Time Weighted Average), monitoring at the lower level, has not finalized what actions will be taken.

JG-If TWA is the same as STEL, which is quite higher than the GPL, does that mean you don't have equipment that can detect the GPL?

Not in real time, in a long term monitoring situation we do. When CDC promulgated these limits, there was no expectation of any adverse health effects between STEL and the normal way these plants are operated and people working in. STEL is our TWA

Q-Can it still be accurate, if we don't have monitoring equipment to detect agent at the GPL?
A-Not in real time, but in long term it is
Q-And that will be accurate for the new limits?
A-Yes
Q-What is the CMA doing to address this issue? Near Real Time? NRC is trying to tryout? Test?
A-NRC is pushing us for WPL, not as much as GPL, enhancing WPL, response times etc.
Q-Anything promising?
A-I have been told there is not anything out there for at least 10 years in the R&D world.

Debbie Kim - First responder community has hand held devices that detect NRT as point source, aim at certain source to determine detection etc, has this technology expanded beyond first responder, as I understand technology has not matured beyond this, good w/in couple feet and direct approach.

Q-How much R&D does CMA conduct?
A-CMA tested 28 more promising technologies and sent report to the CDC.

A-The concentration between WPL, GPL and the STEL is not expected to have any physiological change or harm anyone that is exposed to these limits, if we monitored every 4-8-12 hrs maximum, in all areas around the plant and if we found something on the base, there would be plenty of time to identify the source and take action, move people from area etc., take action before anyone would be exposed at a level that would pose any harm.

The CDC issue was with 30-year chronic exposure that may potentially one day have an impact if (a person is) exposed for 30 years.

Q-DO-Should we be doing something different?

A-No, what we have now is the best possible strategy monitoring system in place, validated by others as well, but we are asked to keep looking for improved system, that is why CMA is now tied with the DOD.

Deseret Chemical Depot Update – Colonel Cooper

Mission goes beyond chemical destruction to closure of the depot as well. What will happen to the Depot? Just a suggestion on the table - Army continues to use it for conventional ammunition facility. OMF closure – beginning the planning stages, start to actually close portions of the facility that are not used anymore, and look at the workforce, reshaping will start in Sept 05.

Issues w/several questions submitted to the commission have been addressed and the report will be sent to the commission and posted on the CAC website. Management did not put together this document, but had the workers do it with some guidance from low-level management.

Q-DK-19 May press release – VX chem. Alarm?
A-This incident happened at the lab, two workers exited at least 5 min before the alarm went off, a draft critique is in the control office, investigation team has been established, don't have final results yet, no violations and no exposure, Air Handling systems were working properly.

Dennis Downs expressed appreciation to Col. Cooper for his tremendous responsiveness and has been great to work with, wish him well and thanks for all that he has done.

AGENDA ITEM: September, update of closure status of OMF Plant

Program Status – Letter of Concern follow up, Land mine update– Dale Ormond
A letter of concern was sent to the systems contractor about operational issues, copy forwarded to Debbie and Dennis Downs. These were internal issue between myself and the contractor, the contractor has made significant improvements, however a number of events did not go the way they were expected, a collection of events showed some regression, contractor responded w/some implementation plans and a number of initiatives have been implemented, since the letter there have been no significant incidents, productivity has increased, but there has been a rise in reportable injury rate, not associated w/plant, but with administrative side, we need to be communicating to all employees about safety, the language was very strong, but pleased w/response by contractor.

In response to the landmines – we have changed schedule a bit, we are focusing on single munitions, we were trying to do rockets, containers etc. at the same time, but now focusing on one munition type at a time. The tons are finished, now focusing on projo's, landmines will be pushed off until after spray tanks.

GS-Thanks for such great oversight, really appreciate it.

Dale Ormond- We continue to get better and better as we move forward.

AGENDA ITEM: Will update in September about landmine campaign.

Plant Status – Stephen Frankiewicz
The letter was very useful in order to make a cultural change in safety. We have had a great track record since Feb and are very happy with where we have come since letter. Lost day/hour injury rate has surpassed 3Million. Injuries are being made outside of the plant, which we are taking very seriously and trying to resolve these issues. Processing has been improved and we are benefiting in being focused on single munitions instead of multiple munitions. It is estimated that in August we should have destroyed 50% of stockpile. We had a very successful MPF trial burn, finished 2 days ahead of time.

David Ostler – Was it mentioned that you are destroying 3000 projos a week?
Yes. We operate 24 hours p/day; destroy about 450 p/day.
How many per hour does that work out to?
Varies per hour, depending on what happens with machines etc., but would like to get to 4000, but with safe production.
Was the Trial burn for the MPF secondary waste?
No, it was projos and tons. We are preparing now for spray tanks, mine scheduled for fall. Our long-range plans include mustard, secondary waste and closure.

Mustard strategy – Gary McCloskey–
Mr. Mcloskey came from JACADS, now at TOCDF, he presented on the mustard strategy. There are 3 types of containers or projectiles at the site. Mr McCloskey described the characteristics of the mercury containers and informed the commission about the strategy for destroying the mustard. There was a question about the percentage of ton containers that are contaminated with mercury. There are 6397 mustard ton containers, 15% of ton containers have mercury contamination ranging from about 200 ppm up to 1% of contents or 10,000 ppm, and it is believed that this is a result of the manufacturing process in which the containers were made. There are 2 distinct populations of mustard. The characteristics vary between each container. It was a random process to discover the mercury content so now will go through and sample each container to get mercury level of each one.

DSHW Update – Marty Gray
EPA permits only last for 10 years, expired in 1999 and took us almost 5 years to renew, we have finished that process, and gave the facility 90 days to come into full compliance with the new permit. The permit does not include mustard. Currently have spray tank demonstration plans out for public comment, 80lbs of lead and will do some testing to verify engineering testing information. Public comment ends July 2.

JG-Permit renewed 10 years from now?
A-10 years from issue date.

AGENDA ITEM: September, results from the public comment period ending July 2, 2004.

New Business- New items for business please submit to Heather Greenwall for discussion at next meeting.

Dale Ormond recognized the work of Stephen Frankiewicz who is leaving and going back to the home office to head up the Homeland Security division. We are a lot better off than when he came. Thank you Steve!

CAC - We all have appreciated working with Steve.

Gary Mclosky is the new manger for EG & G.

Next meeting, July 8 Annual Picnic.

Meeting adjourned at 8:37 p.m.